Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-5.   (Canceled).

6.   (Currently Amended) A method for managing memory synchronization in a computer system having multiple devices sharing memory resources, comprising ~~the steps of~~:

    determining whether a memory element within the memory resource has changed;

    determining whether a memory synchronization event has occurred among the multiple devices;

    synchronizing the multiple devices if no synchronization event has occurred; <u>and</u>

    <u>preventing synchronizing of the memory resource with the multiple devices if the memory resource is not to be shared</u>.

7.   (Canceled).

8.   (Original) The method of claim 6 wherein the memory resource comprises a page frame memory.

9.   (Currently Amended) The method of claim 6 wherein <u>determining whether a memory element within the memory resource has changed</u> ~~step a~~ comprises:

    determining ~~the~~ <u>an</u> occurrence of a translation buffer error.

10.   (Currently Amended) The method of claim 6 further comprising ~~the step of~~:

generating an issue slot for each device to manage instructions given each of the plurality devices and to observe the change of a memory element and the need for a memory synchronization determination.

11. (Currently Amended) A computer program product implemented on a computer system, the computer program product having computer useable code to manage memory synchronization in the computer system having multiple devices sharing memory resources, comprising:

computer program code to determine whether a memory element within the memory resource has changed;

computer program code to determine whether a memory synchronization event has occurred among the multiple devices;

computer program code to synchronize the multiple devices if no synchronization event has occurred; and

computer program code to prevent synchronizing of the memory resource with the multiple devices if the memory resource is not to be shared.

12. (Canceled).

13. (Original) The computer program product of 11 wherein the memory resource comprises a page frame memory.

14. (Original) The computer program product of claim 11 further comprising computer program code to determine the occurrence of a translation buffer error.

15. (Original) The computer program product of claim 11 further comprising computer program code to generate an issue slot for each device to manage instructions given each of the plurality devices and to observe the change of a memory element and the need for a memory synchronization determination.

16.-25. (Canceled).

26.   (New) A system, comprising:

a plurality of processing devices;

a plurality of memory resources accessible to the processing devices;

means for synchronizing the memory resources to the processing device; and

means for overriding synchronization of a memory resource when the memory resource is not shareable or has already been synchronized.

27.   (New) The system of claim 26 wherein the means for overriding synchronization of the memory resource comprises means for overriding synchronization upon an occurrence of a translation buffer error.